

IN THE CLAIMS:

Please cancel Claims 1-97 without prejudice to or disclaimer of the subject matter contained therein.

Please add Claims 98-121 as follows:

--98. (New) A data structure for use in accessing a plurality of data files, the data structure comprising:

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a plurality of annotation storage areas adapted to correspond with said data files, each annotation storage area containing an annotation representing a time sequential signal and each annotation storage area comprising a plurality of block storage areas each containing phoneme and word data forming a respective temporal block of the annotation and each block having an associated time index identifying a timing of the block within the corresponding annotation,

wherein each block storage area includes a plurality of node storage areas, each associated with a node which represents a point in time at which a word and/or phoneme begins or ends within the corresponding annotation, and each node storage area having a time offset storage area containing a time offset defining the point in time represented by the node relative to said time index associated with the corresponding block;

wherein each node storage area further has:

i) one or more phoneme link storage areas, each having a phoneme storage area containing data identifying a phoneme associated with the corresponding node; or

ii) one or more word link storage areas, each having a word storage area containing data identifying a word associated with the corresponding node; and

wherein one or more of said node storage areas has at least one of said phoneme link storage areas and at least one of said word link storage areas.

99. (New) A data structure according to claim 98, wherein the temporal blocks of the annotation are of equal time duration.

100. (New) A data structure according to claim 98, wherein the time index associated with each block storage area identifies the location of the block storage area within the database.

101. (New) A data structure according to claim 98, wherein one or more of said data files is representative of a time sequential signal and wherein the time offsets stored in said time offset storage areas are time synchronised with the time sequential signal represented by the corresponding data file.

102. (New) A data structure according to claim 98, wherein the phoneme data contained within a phoneme storage area identifies a phoneme which start at the corresponding node and which ends at another node, and wherein said phoneme link storage area further has a node offset storage area containing data identifying the node at which the corresponding phoneme ends.

103. (New) A data structure according to claim 98, wherein the word data contained within a word storage area identifies a word which begins at the corresponding node and which ends at another node, and wherein the word link storage area further has a node offset storage area containing data identifying the node at which the corresponding word ends.

104. (New) A data structure according to claim 98, wherein one or more of said phoneme storage areas further has a weighting storage area containing a weighting associated with the corresponding phoneme.

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105. (New) A data structure according to claim 104, wherein said phoneme and word data is generated by an automatic speech recognition system and wherein said weighting represents a confidence output by the automatic speech recognition system that it correctly recognised the corresponding phoneme.

106. (New) A data structure according to claim 98, wherein one or more of said word link storage areas further has a weighting storage area containing a weighting associated with the corresponding word.

107. (New) A data structure according to claim 106, wherein said phoneme and word data is generated by an automatic speech recognition system and wherein said weighting represents a confidence output by the automatic speech recognition system that is correctly recognised the corresponding word.

108. (New) A data structure according to claim 98, wherein one or more of said node storage areas include a plurality of phoneme link storage areas.

109. (New) A data structure according to claim 98, wherein one or more of said node storage areas includes a plurality of word link storage areas.

110. (New) A data structure according to claim 98, wherein said one or more of said node storage areas has a plurality of said phoneme link storage areas and a plurality of said word link storage areas.

111. (New) A data structure according to claim 98, further comprising a plurality of data file storage areas, each storing a respective one of said plurality of data files.

112. (New) A data structure according to claim 111, wherein one or more of said data files comprises audio and/or video data.

113. (New) A data structure according to claim 112, wherein the annotation associated with said audio and/or video signal is derived from said audio and/or video data.

114. (New) A data structure according to claim 113, wherein said annotation is derived from said audio and/or video data by a speech recognition system.

115. (New) A data structure according to claim 98, wherein one or more of said annotations is derived from an automatic speech recognition system and wherein the annotation storage areas containing those annotations further comprises a header storage area containing header data relating to the automatic speech recognition system that generated the annotation.

116. (New) A data structure according to claim 115, wherein said header storage area identifies the language and the word and phoneme sets used by the automatic speech recognition system.

117. (New) A computer readable medium storage computer executable instructions for defining a data structure of use in accessing a plurality of data files, the instructions comprising:

instructions for defining a plurality of annotation storage areas adapted to correspond with said data files, each annotation storage area containing an annotation representing a time sequential signal and each annotation storage area comprising a plurality of block storage areas each containing phoneme and word data forming a respective temporal block of the annotation and each block having an associated time index identifying a timing of the block within the corresponding annotation,

wherein each block storage area includes a plurality of node storage areas, each associated with a node which represents a point in time at which a word and/or phoneme begins or ends within the corresponding annotation, and each node storage area having a time offset

storage area containing a time offset defining the point in time represented by the node relative to said time index associated with the corresponding block;

wherein each node storage area further has:

- i) one or more phoneme link storage areas, each having a phoneme storage area containing data identifying a phoneme associated with the corresponding node; or
- ii) one or more word link storage areas, each having a word storage area containing data identifying a word associated with the corresponding node; and

wherein one or more of said node storage areas has at least one of said phoneme link storage areas and at least one of said word link storage areas.

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118. (New) A data structure defining a phoneme and word lattice, the data structure comprising:

data for defining a plurality of nodes within the lattice and a plurality of links connecting the nodes within the lattice;

data associating a plurality of phonemes with a respective plurality of links;
and

data associating at least one word with at least one of said links;
wherein said data structure defining said phoneme and word lattice is arranged in a time ordered sequence of blocks.

119. (New) The data structure according to claim 118, wherein each node comprises time offset of a node from the start point of a block.

120. (New) The data structure according to claim 118, further comprising a header having start time.

121. (New) The data structure according to claim 118, wherein said header comprises information of phoneme, word or their mixture.
